

Remarks

Applicants have canceled claims 1-18 and have added new claims 19-92. Support for the added claims is found in the specification and claims as filed. For example, support for the added claims can be found at least as follows:

Support for treating a subject with an immune system deficiency (in claims 19, 34, 45, 48, 56, 60 and 82) can be found in the specification, for example at: page 40, lines 7-12.

Support for administering an immunostimulatory nucleic acid in an amount sufficient to promote a cytotoxic lymphocyte response (in claims 19, 34, 80 and 82) can be found in the specification, for example at: page 10, lines 6-7; page 14, lines 6-11, and page 42, lines 22-35.

Support for administering a nucleic acid in association with a targeting means or high affinity binding molecule (in claims 19, 37 and 82) can be found in the specification, for example at: page 15, lines 33-39, and line 36 of page 39 through line 4 of page 40.

Support for an immunostimulatory nucleic acid comprising a 5'-CG-3' nucleic acid sequence (in claims 20 and 83) can be found in the specification, for example at: page 7, lines 13-25.

Support for an ionic or covalent bond (in claims 21, 37, 47, 61, 71 and 82) can be found in the specification, for example at: page 15, line 33 through page 16 line 4, and page 39, line 36 through page 40, line 4.

Support for a molecule that binds to a target cell (in claims 22, 37, 47 and 61) can be found in the specification, for example at: page 15, lines 33-39.

Support for a B-cell and a natural killer cell (in claim 23) can be found in the specification, for example at: page 15, lines 33-39.

Support for a sterol, a lipid and a target cell specific binding agent (in claim 24) can be found in the specification, for example at: page 15, lines 33-39.

Support for a cationic lipid and a virosome (in claim 25) can be found in the specification, for example at: page 15, lines 33-39.

Support for a ligand recognized by a target cell specific receptor (in claim 26) can be found in the specification, for example at: page 15, lines 33-39.

Support for an immunostimulatory nucleic acid comprising a 5'-purine-purine-cytosine-guanine-pyrimidine-pyrimidine-3' nucleic acid sequence (in claims 27, 35, 48, 56, 65, 81 and 86) can be found in the specification, for example at: page 7, lines 31-38 and page 18, lines 34-36.

Support for an immunostimulatory nucleic acid comprising a 5'-purine-TCG-pyrimidine-pyrimidine-3' nucleic acid sequence (in claims 27, 35, 48, 56, 66, 81 and 86) can be found in the specification, for example at: page 7, lines 31-38 and page 18, lines 34-36.

Support for an immunostimulatory nucleic acid comprising one or more 5'-TCG-3' nucleic acid sequences (in claims 27, 35, 48, 56, 67, 81 and 86) can be found in the specification, for example in: SEQ ID NO: 24 and SEQ ID NO: 25.

Support for an immune system deficiency associated with a tumor or cancer or a primary immunodeficiency (in claims 28, 38, 52 and 87) can be found in the specification, for example at: page 8, lines 6-11, page 13, lines 1-5, and page 41, lines 7-28.

Support for an immune system deficiency associated with an infection or an acquired immunodeficiency (in claims 29, 39, 53, 58 and 88) can be found in the specification, for example at: page 8, lines 6-11, and page 13, lines 1-5.

Support for chemotherapy, immunotherapy or other therapy (in claims 30, 40 and 89) can be found in the specification, for example at: page 8, lines 19-23, and page 41, lines 7-9.

Support for an immunodeficiency virus or an acquired immunodeficiency syndrome (in claims 31, 41, 54, 72, 73, 74, 78, 79, and 80) can be found in the specification, for example at: page 13, line 8-26.

Support for an oral, mucosal, transdermal, systemic, or injected administration (in claims 32, 33, 42, 43, 44, 59, 91 and 92) can be found for example at: page 42, lines 8-11.

Support for administering an antigen associated with a tumor, cancer, a bacterial infection, a viral infection, a fungal infection, a parasite infection, or an intracellular pathogen (in claims 36, 46, 84 and 85) can be found for example at: page 8, lines 6-11; page 14, lines 31-39; and page 40, lines 19-25.

Support for an immunostimulatory nucleic acid molecule in association with a target cell specific binding agent via an ionic or covalent bond (in claim 37) can be found for example at: page 15, line 33-page 16 line 4, and page 39, line 36-page 40, line 4. page 41, lines 7-9.

Support for treating or eliminating a tumor in a subject with an immune system deficiency (in claim 45) can be found in the specification, for example at: page 42, lines 22-35.

Support for treating an infectious disease in a subject with an immune system deficiency (in claim 48) can be found in the specification, for example at: page 42, lines 22-35.

Support for a pathogen (in claims 49, 51, 69 and 84) can be found in the specification, for example at: page 41, lines 1-5.

Support for an infectious disease caused by a parasite infection (in claims 36 and 50) can be found in the specification, for example at: page 8, lines 6-11.

Support for an infectious disease caused by cytomegalovirus, *Mycobacterium tuberculosis*, *Mycobacterium avium*, *Toxoplasma gondii*, a fungus, or varicella zoster virus (in claim 51) can be found in the specification, for example at: page 13, line 7 through page 14, line 15.

Support for an immune system deficiency associated with an immunodeficiency virus, or a human immunodeficiency virus (in claims 54 and 55) can be found for example at: page 13, lines 7-9.

Support for a method for treating or preventing an immune system deficiency in a subject (in claim 56) can be found in the specification, for example at: page 8, lines 6-11.

Support for increasing production of IFN-gamma (in claim 60) can be found in the specification, for example at: page 26, lines 4-11.

Support for increasing secretion of a cytokine (in claims 62 and 69) can be found in the specification, for example at: page 26, lines 4-11.

Support for RANTES (in claim 63) can be found in the specification, for example at: page 40, lines 14-17.

Support for a cytokine secreted from a macrophage, a monocyte, or a lymphocyte (in claim 64) can be found in the specification, for example at: page 27, line 11 through page 28, line 8, and page 29, lines 17-22.

Support for a nucleic acid comprising the sequence 5'-purine-purine-CG-pyrimidine-pyrimidine-CG-3' (in claim 68) can be found in the specification, for example in: SEQ ID NO: 24 and SEQ ID NO: 25.

Support for antigen-specific cytokine secretion (in claim 69) can be found in the specification, for example at: page 40, line 46 through page 41, line 5.

Support for administering an immunostimulatory nucleic acid molecule and an antigen to an individual (in claims 69, 70, 71, 84 and 85) can be found in the specification, for example at: page 40, lines 19-25.

Applicants believe that these new claims introduce no new matter.

Request for interference under 37 CFR §1.604(a)

Pursuant to 37 C.F.R. § 1.604(a), Applicants seek to have an interference declared with U.S. published patent application US 2002/0142977 (Raz et al.), serial no. 09/820,484, filed March 28, 2001 and published on October 3, 2002, and any continuation or divisional applications depending therefrom (including U.S.S.N. 10/339,885 and U.S.S.N. 10/340,275 both filed on January 10, 2003). Applicants seek to have an interference declared with US 2002/0142977, because the subject matter claimed in US 2002/0142977 was invented by Applicants as is disclosed in one or more of the applications to which this application claims priority, such as the application now issued as US 6,207,646 B1.

Applicants propose at least the following count for an interference:

Proposed Count

Claim 8 of US 2002/0142977

or

Claim 41 of this application

Applicants submit that at least claim 8 of US 2002/0142977 and claim 41 of the instant application are interfering and correspond to the proposed count.

Pursuant to 37 C.F.R. § 1.604(b), Applicants inform the Examiner that claims 34-81 of this preliminary amendment correspond to and were substantially copied from the claims of U.S. published patent application US 2002/0142977 as follows:

Claims of US 2002/0142977	Claims added herewith
1	34
2	35
3	36
4	37
5	38
6	39
7	40
8	41

9	43
10	44
11	45
12	46
13	47
14	48
15	49
16	50
17	51
18	52
19	53
20	54
21	55
22	56
23	57
24	58
25	59
26	60
27	61
28	62
30	63
31	64
32	65
33	66
34	67
35	68
36	69
37, 38, 39	70, 71
40	72
42	73

43	74
45	75
46	76
47	77
48	78
51	79
52	80
53	81

Applicants wish to bring to the attention of the Examiner that the disclosure on which the added claims are based was first filed at least in US Serial No. 08/386,063 filed on February 7, 1995 or in an earlier parent application, and was also issued on March 27, 2001 as US 6,207,646 B1 (based on US Serial No. 08/738,652, filed on October 30, 1996). US 6,207,646 B1 should be a statutory bar to the patentability of all of the claims of US published patent application 2002/0142977, but not to the patentability of the claims of this application.

Request for interference under 37 CFR §1.607(a)

Pursuant to 37 C.F.R. § 1.607(a), Applicants seek to have an interference declared with U.S. issued patent US 6,534,062 (Raz et al.), serial no. 09/820,484, filed March 28, 2001 and issued on March 18, 2003. Applicants seek to have an interference declared with US 6,534,062, because the subject matter claimed in US 6,534,062 was invented by Applicants as is disclosed in one or more of the applications to which this application claims priority, such as the application now issued as US 6,207,646 B1.

Applicants propose at least the following count for an interference:

Proposed Count

Claim 9 of US 6,534,062

or

Claim 31 or 90 of this application

Applicants submit that at least claim 9 of US 6,534,062 and claim 90 of the instant application are interfering and correspond to the proposed count.

Pursuant to 37 C.F.R. § 1.607(c), Applicants inform the Examiner that claims 19-33 and 82-92 of this preliminary amendment correspond to and were substantially copied from claims 1-11 of U.S. issued patent US 6,534,062 as follows:

Claims of US 6,534,062	Claims added herewith
1, 3, 4	19, 21, 22, 23, 24, 25, 26, 82, 84, 85
2	20, 83
5	27, 86
6	28, 87
7, 8, 9	29, 30, 31, 54, 88, 89, 90
10	32, 91
11	33, 92

Applicants wish to bring to the attention of the examiner that the disclosure on which the added claims are based was first filed at least in US Serial No. 08/386,063 filed on February 7, 1995 or in an earlier parent application, and was also issued on March 27, 2001 as US 6,207,646 B1 (based on US Serial No. 08/738,652, filed on October 30, 1996).

Serial No.: TBD

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Art Unit: Not yet assigned

US 6,207,646 B1 should be a statutory bar to the patentability of all of the claims of US Patent No. 6,534,062, but not to the patentability of the claims of this application.

Respectfully submitted,

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